Species, Habitats and Conservation Targets Fact Sheet

McNary and Umatilla National Wildlife Refuges

Habitats

Habitat types found on McNary and Umatilla National Wildlife Refuges include shrub-steppe uplands, croplands, woody riparian, basalt cliffs, emergent marsh, and large open water areas. Several islands also exist. These habitats support a wide variety of resident and migratory fish and wildlife species.

Wetlands and River / Reservoir Habitats

Refuge wetlands provide migratory and nesting habitat for waterfowl. They also provide nesting habitat for marsh birds such as pied-billed grebe, American coot, Virginia rail, and sora. Common songbirds breeding in wetlands on both refuges include marsh wren, red-winged blackbird, and yellow-headed blackbird.

Riparian habitats

Riparian areas support large numbers of birds during migration and winter, particularly songbirds. Up to 30 bald eagles can winter on both refuges. Common songbirds using the refuges during migration and/or winter are: yellow-rumped warbler, orange-crowned warbler, ruby-crowned kinglet, dark-eyed junco, white-crowned sparrow, and song sparrow. Common breeding species in refuge riparian habitats include red-tailed hawk, American kestrel, California quail, ring-necked pheasant, American robin, Northern flicker, Bewick's wren, house wren, black-capped chickadee, Bullock's oriole, and song sparrow.

Shrub-steppe habitats

Shrub-steppe uplands provide habitat for burrowing owl, long-billed curlew, western meadowlark, western kingbird, and savannah sparrow. Shrub-steppe obligate bird species such as sage grouse, sage thrasher, and Brewer's sparrow, if present before, have virtually disappeared as breeders because of the loss of sagebrush and bunchgrasses over the years.

Canada geese landing on McNary Slough. Photo by C&G Bartlett

Painted turtle at McNary Refuge. Photo by C&G Bartlett

Migratory Birds

Umatilla and McNary Refuges' primary contribution to migratory birds is in providing migratory and wintering habitat. A number of species nest on the Refuge, but the highest diversity of bird species is attained during the spring and fall migrations.

Waterfowl

Thousands of waterfowl use wetlands and croplands on both refuges during fall, winter, and spring. Prior to about 1990, the number of wintering waterfowl exceeded 500,000. Since then, generally less than 150,000 waterfowl have been recorded during individual aerial surveys. Abundant wintering duck species include mallard, pintail, and American wigeon, canvasback, and lesser scaup. Canada geese are the most numerous goose species; however, white-fronted geese and snow geese can occur during fall and spring migration. Species nesting on the Refuges include Canada goose, mallard, gadwall,

Northern shoveler, American green-winged teal, blue-winged teal, cinnamon teal, redhead, ring-necked duck, ruddy duck, and wood duck.

Shorebirds and waterbirds

The Wallula Delta located at the confluence of the Walla Walla and Columbia Rivers on McNary Refuge is a major shorebird stopover site in our area of the Columbia Basin. Surveys conducted since the early 1990's have recorded annually hundreds to often thousands of killdeer, American avocet, western sandpiper, least sandpiper, dunlin, and long-billed dowitcher. Shoreline and shallow water areas of other parts of McNary and Umatilla Refuges also host small numbers of shorebirds during migration. Shorebirds that breed on both refuges include American avocet, black-necked stilt, killdeer, long-billed curlew, Wilson's phalarope, and Wilson's snipe.

Refuge islands on both refuges support great blue heron and black-crowned night heron rookeries. Breeding colonies of Caspian tern, California gull, ring-billed gull, American white pelican, and double-crested cormorants are found on McNary islands.

Mammals

Limited data is available on mammals occurring on the refuges. The most common large mammal on Umatilla Refuge is the mule deer, with a current population numbering ~ 250 animals. Both mule and white-tailed deer occur on parts of McNary Refuge. American beaver, muskrat, mink, and river otter inhabit wetlands on both refuges. Carnivores such as coyote, raccoon and striped skunk are frequently seen on both refuges. An occasional cougar may visit Umatilla Refuge.

Amphibians and Reptiles

Amphibian and reptile species known to occur in suitable habitat include great basin spadefoot , Woodhouse's toad , the nonnative bullfrog, western painted turtle, sagebrush lizard, common garter snake, racer, gopher snake, and Western rattlesnake.

Fish

Several species of native anadromous salmonids (salmon and steelhead) traverse the Columbia River portion of Umatilla and McNary Refuges during their migrations upstream to spawning areas and downstream to the Pacific Ocean. Backwater wetland areas with a direct connection to the Columbia River such as Casey Pond on McNary Refuge and perhaps Paterson Slough on Umatilla Refuge are used as rearing habitat by smolts during winter and early spring when water temperatures are not too high. Other native fish that can be found (primarily within the Columbia River) include chiselmouth, northern pikeminnow, peamouth, sand roller , and suckers.

Common introduced fishes include largemouth bass, smallmouth bass, crappie, walleye, common carp, and yellow perch.

Conservation Targets

The planning team has identified eight priority "conservation targets" for these refuges. Keeping the targets to eight is important for simplifying and focusing the planning effort. The targets are:

- Shrub-steppe Habitat
- Riparian Habitat
- Wetlands/Deepwater Habitats
- Cliffs/Talus
- Islands
- Waterfowl
- Shorebirds
- Threatened and Endangered Species

Much of our planning work has been focused on identifying the key ecological attributes of these targets. In other words, what are the key processes, landscape features, and conditions necessary to sustain the targets over the next fifty to 100 years?

The main criteria for target selection included:

- inclusion of the four main natural habitat types found at the refuges
- targets reflective of the Refuge System mission and the refuge purposes
- recommended as a conservation target in the Wildlife and Habitat Management Review, October 2003

For more information

This fact sheet was authored by Howard Browers, Wildlife Biologist for the Refuge Complex.

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